DECISION RECORD

Decision: It is my decision to authorize the issuance of a 10 year grazing permit and a 10 year grazing lease to John Clemmons for Allotment #65049 and #65050.

The permit on Allotment #65049 will be for 186 Aus for 1607 AUMs at 72 % public land from March 1 to the end of February. The lease on Allotment #65050 will be for 39 AU's for 468 AUMs at 100% public land for 18 AUs for 216 AUMs active use and 21 AUs for 244 AUMs suspended use at 100% public land. from March 1 to the end of February. Any additional mitigation measures identified in the environmental impacts sections of the attached environmental assessment have been formulated into stipulations, terms and conditions. Any comments made to this proposed action were considered and any necessary changes have been incorporated into the environmental assessment.

If you wish to protest this proposed decision in accordance with 43 CFR 4160.2, you are allowed 15 days to do so in person or in writing to the authorized officer, after the receipt of this decision. In the absence of a protest, this proposed decision will become the final decision of the authorized officer without further notice, in accordance with 43 CFR 4160.3. Please be specific in your points of protest. A period of 30 days following receipt of the final decision, or 30 days after the date the proposed decision becomes final, is provided for filing an appeal and petition for the stay of the decision, for the purpose of a hearing before an Administrative Law Judge (43 CFR 4.470).
The appeal shall be filed with the office of the Field Office Manager, 2909 West Second, Roswell, NM, and must state clearly and concisely your specific points.

Signed by T. R. Kreager — 4/03/01
Assistant Field Manager — Date

ENVIRONMENTAL ASSESSMENT
for
GRAZING AUTHORIZATION

ALLOTMENT 65049 SECTION 3 and
ALLOTMENT 65050 SECTION 15

EA-NM-060-00-165

August 2000

U.S. Department of the Interior
Bureau of Land Management
Roswell Field Office
Roswell, New Mexico

Environmental Assessment for Grazing Allotments 65049 and 65050

I. Background

A. Introduction

When authorizing livestock grazing on public range, the Bureau of Land Management (BLM) has historically relied on a land use plan and environmental impact statement to comply with the National Environmental Policy Act (NEPA). A recent decision by the Interior Board of Land Appeals, however, affirmed that the BLM must conduct a site-specific NEPA analysis before issuing a permit or lease to authorize livestock grazing. This environmental assessment fulfills the NEPA requirement by providing the necessary site-specific analysis of the effects of issuing a new grazing permit and lease on Allotments 65049 and 65050.

The scope of this environmental assessment is limited to the effects of issuing a new grazing permit and lease on Allotments 65049 and 65050. Over time, the need could arise for subsequent management activities which relate to grazing authorization. These activities could include vegetation treatments (e.g., prescribed fires, herbicide projects), range improvement projects (e.g., fences, water developments), and others. Future management actions related to livestock grazing would be addressed in project-specific NEPA documents as they are proposed.

B. Purpose and Need for the Proposed Action

The purpose of issuing a new grazing permit and lease would be to authorize livestock grazing on public range on Allotments 65049 and 65050. The permit and lease would need to specify the types and levels of use authorized, and the terms and conditions of the authorization pursuant to 43 CFR 4130.3, 4130.3-1, 4130.3-2 and 4180.1.

C. Conformance with Land Use Planning

Upon review of the Roswell Resource Management Plan/Environmental Impact Statement (Bureau of Land Management 1997), the proposed action was found to conform with the Record of Decision as required by 43 CFR 1610.5-5.

D. Relationships to Statutes, Regulations, or Other Plans

The proposed action and alternatives are consistent with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (33 U.S.C. 1251 et seq.), as amended;

the Endangered Species Act (16 U.S.C. 1535 et seq.) as amended; the Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); Executive Order 11988, Floodplain Management; and Executive Order 11990, Protection of Wetlands.

II. Proposed Action and Alternatives

A. Proposed Action: (Existing Situation With Modification of Terms and Condition)

To authorize the grazing permit and lease on the **Clemmons & Erdmann**, Allotments #65049 and 65050. The grazing permit on Allotment #65049 is for 186 AU's active use at 72% public land for 1607 AUMs and the grazing lease on Allotment #65050 for 18 AUs at 100% public land for 216 AUMs active use and 11 AUs at 100% public land for 244 AUMs suspended use. Specifically, to authorize a grazing permit and lease based on the above livestock numbers from March 1 to the last day of February of each year at 72% and 100% public land, **while** continuing current livestock management practices.:

Terms and Conditions:

The following are terms and conditions specific to the Proposed Action alternative. Any changes to these terms and conditions may be initiated by either party through the consultation and coordination process.

1. Robel's vegetative monitoring methodology which has been approved by the five state Lesser Prairie Chicken Interstate Working Group will be implemented to measure lesser prairie chicken habitat requirements. Specific parameters include:

   Shrub coverage - 25 to 30% composition of entire vegetative community.
   Forb coverage - 10 to 15% composition of entire vegetative community.
   Grass coverage - 60% composition of entire vegetative community; 10% with a visual obstruction reading (VOR) > or equal to 3.0 decimeters, an average VOR of 1.0 decimeter.

Note: It is important to understand that these parameters in certain pastures may not be met until the habitat has time to respond to the new grazing management practices. As long as improvement is being made in those pastures, then changes should not be necessary. If prairie chicken habitat requirements are not being improved as a result of livestock grazing practices, changes will be necessary.

2. Livestock grazing management changes may be required as a result of periods of abnormal climatic patterns and the vegetative condition resulting from these climatic changes.

3. A range evaluation will take place every five years and adjustments will be made if necessary.

B. No Grazing Alternative:

Under this alternative, if selected, no grazing would be authorized on federal lands within the **Clemmons & Erdmann** Allotments #65049 and 65050. The No Grazing alternative was considered, but not chosen in the Rangeland Reform Environmental Impact Statement (EIS) Record of Decision (ROD) (p. 28). The elimination of grazing in the Roswell Field Office Area was considered but eliminated by the Roswell RMP/ROD (pp. ROD-2).

III. Affected Environment

General Setting

Allotment 65049 lies within the Roswell Grazing District while Allotment 65050 lies outside of the Grazing District established subsequent to the Taylor Grazing Act. Grazing authorizations on Public Lands inside the Grazing District Boundary is governed by Section 3 of the Taylor Grazing Act while the Public Lands outside the Grazing District are governed by Section 15 of the Act.

The **Clemmons & Erdmann** Allotments #65049 and 65050 are located approximately 35 miles east of Roswell and to the north of U. S. Highway 380. The allotments are within the northern portion of the Caprock Wildlife Management Area.

The current land status for the allotments is shown on the allotment map. The approximate acreage for allotment 65049 is 7471 acres and allotment 65050 has 1920 acres of Public Land.

In general, the range condition for pastures in the allotment have improved from 1980 to the present. Ground cover including litter and vegetation is satisfactory in most areas within the allotment. Vegetative diversity is present and improving. The existing studies, were last read in 2000 by BLM. The results of these studies are incorporated in the data used for this assessment. The Robel method was also implemented to augment existing study data in relation to lesser prairie chicken habitat requirements. These data sheets are attached for your review.

Droughty conditions have occurred in this area over the last few

years. This has raised some concern with resource conditions verus traditional yearlong livestock management practices on some allotments in this area. However, this allotment has had seasonal grazing use (April - September) since 1988, and has residual vegetative cover that has lessened the drought effects. Range condition, range trend and ground cover has been maintained during the droughty period. Vegetative diversity is still high within the allotment.

The following resources or values are not present or would not be affected by the authorization of livestock grazing on Allotments #65049 and 65050; Invasive and Non-native species, Prime/Unique Farmland, Cultural Resources, Native American Religious Concerns, Wild and Scenic Rivers, Hazardous Wastes, water quality, riparian/wetlands, floodplains, Areas of Critical Environmental Concern, and Minority/low Income populations.

Cultural inventory surveys would continue to be required for federal actions involving surface disturbing activities except where criteria to exempt surveys are met. Eligible and potential eligible sites would continue to be protected from damage or archaeologically treated to mitigate damage.

The impact of the proposed action and alternatives to minority or low-income populations or communities has been considered and no significant impact is anticipated.

A. Affected Resources

1. Soils: There are several soil units on this allotment including; Faskin (FaA), Faskin-Malstrom association (FMA), Roswell-Jalmar (RPD), Chispa-Malstrom association (CMB), Ratliff-Redona association (RBA), Jalmar-Roswell-Pyote association (JRC), and the Roswell (RoD).

The majority of these soils exhibit moderate permeability. Their available water capacity runs from moderate to high. Runoff characteristics vary from slow to medium. Water erosion hazard for the soils is slight to moderate. While soil blowing hazard is generally very high. For detailed soil information, please refer to the Soil Survey of Chaves County, New Mexico, Northern Part, published by the Natural Resource Conservation Service (NRCS). A copy of these publications may be reviewed at the BLM Roswell Field Office or a local NRCS office.

Allotment 65049 is in the Canadian Plains Major Land Resource Area. Principal range sites are Sand Hills CP-2, Deep Sand CP-2, Sandy Loam CP-2 and Sandy Plains CP-2. There are minor inclusions of Shallow Sand CP-2 and Loamy CP-2 within the allotment. The mapped Sand Hills and Deep Sand range sites may contain up to 40 - 45

percent of other sites as inclusions. The Public Lands in Allotment 65050 lie within both the Canadian Plains Major Land Resource Area and the High Plains Major Land Resource Area.

2. Vegetation:

There are four primary ecological (range) sites on these allotments; Deep Sand CP-2,Sand Hills CP-2, Sandy Loam CP-2 and Sandy Plains CP-2. The potential plant community for these ecological sites include; sand bluestem, little bluestem, sand dropseed, plains bristlegrass, sand paspalum, black grama, three awn and blue grama. Shrub species which occur are shinnery oak, sand sagebrush, and some mesquite. There have been vegetative monitoring studies done on this allotment from 1981 through 2000 Data at that time placed the public lands in a late ecological rating.

The present plant community is primarily warm season perennial grasses and forbs with a shrub component of shinnery oak and mesquite. There are some cool season grasses present in some areas of the allotment. Dominant grass species include little bluestem, sand bluestem, sand dropseed, mesa dropseed, spike dropseed, three awns, black grama, hairy grama, fall witch grass, red lovegrass, sand lovegrass and sand paspalum. The shrub community is primarily shinnery oak, mesquite, sand sage,and yucca along with broom snakeweed. Forbs include croton, globemallow, western ragweed, blackfoot daisy, Indian rushpea and numerous annual forbs.

The Roswell Field Office two years ago instituted specific vegetative monitoring to evaluate lesser prairie chicken habitat suitability. The Robel Pole methodology was incorporated into the five state Lesser Prairie Chicken Interstate Working Groups management plan.

This new monitoring technique is used in conjunction with standard rangeland monitoring data. Once overall composition is obtained, determining nesting cover structure (Robel Pole) will follow. The Robel Pole methodology is used to collect visual obstruction measurements and identifies those plants causing the obstruction. A minimum of 60 visual obstruction readings should be taken at each study site. Study locations within pastures must be within the shinnery/oak dune plant community. Specific habitat parameters have been established to determine whether or not a pasture or study site is meeting lesser prairie chicken habitat requirements from a vegetative perspective. These parameters are as follows.

- Shrub coverage (all species) 25-30% of entire vegetative community.

- Forb coverage is 15% of entire vegetative community.

- Grass coverage (primarily tallgrass species) 50-60% of entire vegetative community; 10% with a VOR $\geq$ 13 inches. Overall average must be =>4 inches.

The vegetative parameters measured by this methodology can be used to monitor area and provide an indication that livestock management changes may be needed to preserve or enhance habitat. Monitoring data from the Robel Pole method is shown at Attachment 3.

Shinnery oak control has been done on both pastures in 1983 and 1985. The shinnery oak control changed the vegetative aspect of the treated pastures from shinnery oak to grassland.

The RMP/EIS established resource objectives for the various plant community types. Refer to the attached Data Summary Tables (Attachment 1) which depict the allotment community average as it relates to the Desired Plant Community objectives for the Shinnery Oak Dune community and the Grassland Communities. The percentages of grasses, forbs, and shrubs actually found at a particular location will vary with recent weather conditions, past resource uses and the potential of the site. The data used for this assessment is available at the Roswell Field Office.

3. Wildlife:

Raptors that are frequently associated with the vegetation types on this allotment are the red-tailed hawk, swainson's hawk, ferruginous hawk, roughlegged hawk, common nighthawk, and the American kestrel.

Game bird species in this areas include the lesser prairie chicken, scaled and bob white quail, and the mourning dove.

Other bird species that are usually observed are the turkey vulture, roadrunner, chihuahuan raven, great-horned owl, burrowing owl, northern flicker, loggerhead shrike, western meadowlark, western kingbird, pyrrhuloxia, horned lark, and other passerine birds.

At least 33 species of mammals occur on or utilize this allotment. The diversity of small mammals provide for an excellent prey base for carnivores such as the coyote, gray fox, bobcat, raccoon, badger, hooded skunk and striped skunk.

Mammals that provide a prey base include the black-tailed jack rabbit, desert cottontail, spotted ground squirrel, pocket mice, deer mouse, kangaroo rats, northern grasshopper mouse, harvest mice, and the white throated woodrat.

Two big game species that occur the allotment are pronghorn

antelope and mule deer.

Reptiles and amphibians that inhabit the area are the dune sagebrush lizard, southern prairie lizard, lesser earless lizard, side-blotched lizard, longnose leopard lizard, sixlined racerunner, tree lizard, skinks, western diamond back, western rattlesnake, coachwhip, spadefoot toads, western box turtle, and the yellow mud turtle.

4. Threatened/Endangered Species

Federal threatened, endangered, proposed, and candidate species as well as state-listed threatened or endangered species potentially occurring within the proposed project area will be analyzed in this document.

There are no known Federal threatened and endangered species or critical habitat within the allotment.

However, there are several Federal Proposed,Candidate and State listed species that may occupy or utilize the area. These include the mountain plover, lesser prairie chicken, sand dune lizard, swift fox, and the black-tailed prairie dog. For a detailed description of the range, habitats, and potential threats to the swift fox refer to the Biological Opinion (AP11-38) in the RMP.

Special Status Species Known to Occur on this Allotment:

<u>Sand Dune Lizard (State Threatened)</u>

The State Threatened sand dune lizard only occurs in the southeastern corner of New Mexico and the western region of Texas. Within that range its habitat is restricted to active sand dunes and their peripheries (Degenhardt and Jones 1972). Shinnery oak is the dominate plant species that surrounds the top edge of the active sand dune, with a small composition of grasses inside the blowout area.

During 1991 a study was begun to examine the effects of the removal of shinnery oak on lizard habitat. Through five years of research it was demonstrated that there were 70%-94% fewer lizards in treated pastures as compared to non-treated pastures. As a result, the use of herbicides within suitable sand dune lizard habitat (blowouts) will be avoided.

There are scattered shinnery oak dunes blowouts or dune complexes throughout the allotment that provide habitat for the sand dune lizard.

<u>Mountain Plover (Federally Proposed asThreatened)</u>

The mountain plover has been petitioned to be listed as a federally listed threatened species under the Endangered Species Act. Until a determination is made by the USFWS, actions occurring within this species range and habitat must be analyzed and treated as listed species.

The mountain plover is associated with shortgrass and shrub-steppe landscapes throughout its breeding and wintering range. Historically, on the breeding range, it occurred on nearly denuded prairie dog towns (Knowles et al. 1982, Olson-Edge and Edge 1987) and in areas of major bison concentration. All of the endemic grassland birds evolved within a grassland mosaic of lightly, moderately, and heavily grazed areas, and mountain plovers are considered to be strongly associated with sites of heaviest grazing pressure, to the point of excessive surface disturbance (knopf and Miller 1994, Knopf 1996b). Short vegetation, bare ground, and a flat topography are now recognized as habitat-defining characteristics at both breeding and wintering locales. Most mountain plovers breed in Colorado and Montana; breeding also occurs in Wyoming, New Mexico, Arizona, Nebraska, Utah, Kansas, Oklahoma, and Texas.

Surveys: Information was taken from the Federal Register Notice and the Roswell RMP. Statewide surveys have been conducted as well as area surveys by S. Williams. No known breeding populations or wintering locales have been found. Specific surveys for this action were not conducted since recent surveys in May and June of 1998 were completed.

Lesser Prairie Chicken (Federal Candidate)

Several years ago a petition was filed with the U. S. Fish and Wildlife Service (FWS) to list the prairie chicken as threatened. On June 1, 1998 the FWS announced a finding for the petition. After review of all available scientific and commercial information, the Service finds that listing this species is warranted but precluded by other higher priority actions to amend the Lists of Endangered and Threatened Wildlife and Plants. The lesser prairie chicken is added to the Service's candidate species list.

In southeastern New Mexico, lesser prairie chickens exist in the shrub-dominated Plains Bluestem Subtype by using mixed stands of tall grass and shinnery oak.

Lesser prairie chickens rely upon a variety of habitat types within the shinnery oak tall grass community. Seasonal habitat requirements vary from season to season and are often overlapping. This specific allotment contains nesting habitat, booming areas

(leks), brood habitat and foraging habitat.

As with most wildlife species, especially upland game birds, precipitation plays a large role in population fluctuations and habitat conditions. Precipitation patterns have fluctuated drastically for the last twenty years. During the middle eighties precipitation was above normal and chicken populations were high. Except for two years, precipitation has been well below normal during the 1990's.

Population Monitoring Data

The Roswell Field Office has actively monitored prairie chicken booming grounds, population trends and habitat since the early seventies. Historically in New Mexico, the LPC occupied most of the eastern plains. However, numbers and occupied range of the species are much reduced since pre-settlement times; apparently in response to prolonged heavy grazing and brush control in combination with the great droughts of the 1930's and 1950's. It has been reported that currently the LPC occupies approximately one half their original range in New Mexico.

Since the early 1970's LPC populations have fluctuated up and down with the highest period occurring during the middle 1980's. This allotment has 12 leks that have been surveyed since the early 70's. They are all located on allotment 65049. The attached Lek survey results (Attachment #2) of the leks found on this allotment (See enclosed Allotment map with Lek sites) are indicative of the entire Roswell prairie chicken area. The chicken population experienced a dramatic decline starting in the early 1990's.

Black-tailed Prairie Dog (Federally Proposed as Threatened)

The prairie dog was petitioned to be listed as a federally listed threatened species under the Endangered Species Act. After an extensive review, a determination was made by the USFWS, to place this species in the candidate status and will be reviewed every year. This candidate status species are not granted any protection under the Endangered Species Act, but it is BLM policy to manage in such a manner to keep these species from becoming listed. There for it will be analyzed in this document.

The black-tailed prairie dog is a highly social animal that lives in colonies or towns which cover form one acre to tens of thousands of acres of grassland habitat. This species is widespread throughout the high plains area in Arizona, New Mexico, Oklahoma, Texas, Kansas, Nebraska, Colorado, the Dakotas, Montana, and Wyoming.

Numerous ungulate species seek out and take advantage of the highly

nutritional vegetation created by prairie dogs continuously clipping it. Besides attracting ungulates, prairie dogs and their colonies also are used by a wide variety of other species of wildlife. A number of species prey on prairie dogs, and in the case of the black-footed ferret, became very specialized in killing this communal rodent. Because to black-tailed prairie dog influences ecosystem functions through its activities in unique and significant ways, it is considered by some as a keystone species of the prairie grasslands.

There are no known prairie dog towns within this allotment, however there are grassland islands interspaced within the shinnery oak dune plant community that may provide suitable habitat. Adjacent allotments with similar habitat types do have active prairie dog towns.

5. Livestock Management:

Allotment 65049 is grazed on a seasonal basis. Since 1988, the operator has grazed up to 450 head of yearling steers from April through September. From April to the latter part of May up to 450 yearling steers are grazed in the West Sand pasture. In latter May the herd is reduced to 350 head and split between West Sand and East Sand pastures. The public lands within the Section 15 Allotment 65050 are grazed prior to April and after September when the cattle are removed from Allotment 65049.

6. Visual Resources:

The allotment is located in a Class IV Visual Management Area. The Class IV rating means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, the changes should repeat the basic elements of the landscape.

7. Air Quality:

The allotment is in a Class II area for the Prevention of Significant Deterioration of air quality as defined in the federal Clean Air Act, which allows a moderate amount of air quality degradation. Air quality is generally good, Winds are typically southeasterly during the summer, and becoming southwesterly in the winter and early spring. Winds average 10 miles per hour in the fall and 16 miles per hour in the spring, with peak velocities reaching 50 miles per hour. These conditions rapidly disperse air pollutants in the region.

8. Recreation:

Recreation opportunities are focused around hunting and watchable wildlife. Mule deer, antelope, and game birds, such as quail and

dove are taken during hunting seasons. This ranch is used by birders to observe prairie chickens during their lek courtship displays. Legal and physical access to public lands located on this allotment are through state lands, county maintained roads and roads existing on public lands. Off Highway Vehicle designation for public lands within this allotment are classified as "Limited" to existing roads and trails.

9. Caves and Karst:

A complete significant cave or karst inventory has not been completed for the public lands located in this grazing allotment. Presently, no known significant caves or karst features have been identified within this allotment. If at a later date, a significant cave or karst feature is located on public lands within this allotment, that cave or feature may be fenced to exclude livestock grazing and Off Highway Vehicle Use. A separate Environmental analysis would be prepared to construct this exclosure fence.

This allotment is located within a designated area of Low Karst or Cave Potential.

IV. Environmental Impacts

Impacts common to all alternatives:

Under all alternatives, there would be minimal impacts to the sand dune lizard due to the dispersal of livestock. Areas where there is a concentration of livestock (waterings and fence corners) the habitat may be of lower quality, but these areas are small in nature. Range improvements (pipelines) may enhance lizard habitat by creating open dunal areas that are usually bordered by shinnery oak.

There will be no affect to the proposed threatened black-tailed prairie dog and Mountain plover since no known populations exist within the area. Potential habitat does occur but the proposed action and alternatives would not impact these areas from becoming utilized of inhibited.

A. Impacts of the Proposed Action

1. Soils:

Under a normal precipitation regime the level of permitted use as described in the proposed action has not had any adverse impact to the current soil conditions. Some soil loss would continue to occur due to the windy conditions that prevail in this region

during parts of the year. If vegetative cover remains stable soil loss may be minimized.

2. Vegetation:

The continuance of the permitted use at the current use levels authorized by the expiring permit is not anticipated to have any adverse impact to the current vegetative conditions under a normal precipitation regime. The vegetation will continue to be grazed and trampled by domestic livestock and other herbivores as well as rabbits, rodents and insects. Under the proposed action and a normal precipitation regime, it is not anticipated that a significant change in the vegetative composition or amount available for use will occur. The continuance of the present livestock management practices is not anticipated to alter the vegetative composition. Ecological condition and trend is expected to remain stable or improve over the long term at this permitted number.

Grazing at this level in droughty periods will adversely affect some of the vegetative resources. Bunch type grasses (bluestem and dropseed species) will be grazed to a greater extent thus, reducing residual growth that is necessary for desirable lesser prairie chicken habitat. These adverse affects can be minimized during these droughty periods by reducing livestock numbers during these conditions.

3. Wildlife:

Domestic livestock will continue to utilize vegetative resources needed by a variety of wildlife species for life history functions within this allotment. The magnitude of livestock grazing impacts on wildlife is dependent upon the species of wildlife being considered, and its habitat needs. In general, livestock stocking rate adjustments have been made in the past to minimize the direct competition for those vegetative resources needed by a variety of wildlife species. Cover habitat for wildlife will remain the same as the existing situation. Maintenance and operation of existing waterings will continue to provide dependable water sources for wildlife, as well as livestock.

4. Threatened/Endangered Species:

Under the proposed action there would be no affect to Federal threatened and endangered species since there are no known T/E occurrences within this allotment.

Special Status Species Known to Occur on the Allotment:

Under the proposed action, there would be minimal impacts to the

sand dune lizard due to the dispersal of livestock. Areas where there is a concentration of livestock (waterings and fence corners) the habitat may be of lower quality, but these areas are small in nature. Range improvements (pipelines) may enhance lizard habitat by creating open dunal areas that are usually bordered by shinnery oak.

Under the proposed action, negative impacts to the lesser prairie are not anticipated or would be insignificant. The current grazing management practices are such that specific nesting habitat requirements (bluestems) are abundant and provide enough residual cover for nesting.

5 Livestock Management:

Under the proposed action there would be no impacts to the current livestock management. Allotment 65049 would continue to be grazed on a seasonal basis. Since 1988, the operator has grazed up to 450 head of yearling steers from April through September. From April to the latter part of May up to 450 yearling steers are grazed in the West Sand pasture. In latter May the herd is reduced to 350 head and split between West Sand and East Sand pastures. The public lands within the Section 15 Allotment 65050 are grazed prior to April and after September when the cattle are removed from Allotment 65049.

6. Visual Resources:

The continued grazing of livestock would not affect the form or color of the landscape, or the primary aspect of the vegetation within the allotment.

7. Air Quality:

The impacts to air quality would not change from the current situation. A minor amount of air quality degradation would continue.

8. Recreation:

Grazing would have little or no affect on the recreational opportunities. Legal access to this parcel of public land would still remain available.

9. Significant Caves/Karst

No known significant caves or karst features are known to exist on the public lands located within this allotment. Grazing would not affect the karst resources.

B. Impacts of the No Livestock Grazing Alternative.

The No Livestock Grazing Alternative has been previously analyzed at the National level in the Rangeland Reform '94 EIS and in the Roswell RMP/EIS. An in depth analysis of this alternative will not be made in this document. General impacts under this alternative would include no new rangeland improvement and the removal of existing rangeland improvements unless a determination was made that they were beneficial to other uses. Since no grazing authorizations on public lands would be permitted, livestock operators grazing lands adjoining Federal lands would be responsible for preventing the unauthorized use of these Federal lands. The BLM would not fence these lands. Rangeland administrative emphasis would shift to issuing crossing permits to or from nonfederal land inholdings and resolving unauthorized use.

V. Cumulative Impacts

A cumulative impact is defined as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

The analysis of cumulative impacts is driven by major resource issues. The action considered in this environmental assessment (EA) is the authorization of livestock grazing on Allotments 65049 and 65050, and the major issue includes:

The protection of special status threatened or endangered species and its habitat within the allotment area, primarily the lesser prairie chicken. The incremental impact of issuing a grazing permit on these resources must be analyzed in the context of impacts from other actions. Other BLM actions that could have impacts on the identified resource include: Livestock authorization on other allotments within the adjacent shinnery oak dune habitat type, some oil and gas development and activities, rights-of-ways dissecting the area, and recreational use, primarily hunting and subsequent cross country driving.

All authorized activities which occur on BLM land can also take place on state and private lands, with the possibility of decreased management towards resource these resource concerns. Many of the actions which could contribute to cumulative impacts have occurred over many years. Impacts from open-range and yearlong livestock grazing in the last century are still being addressed today and may continue on adjacent land owners.

The proposed action and alternative would not add incrementally to the cumulative impacts to sensitive species or to the overall rangeland health. The conclusion that impacts to these resources from grazing authorization would not be significant are discussed in Section IV of the EA. Under alternatives 1, and especially 2, negative incremental impacts would be expected to be less than under the Proposed Action because the allotment would be more intensively managed and take into account lesser prairie chicken habitat needs.

If the No-Grazing alternative were chosen, some adverse cumulative impacts to resource would be eliminated, but others would continue. Grazing would no longer be available as a vegetation management tool, and BLM lands within the allotment would be less intensively managed. For example, preferred grasses (bluestems) would likely to become decadent without some livestock use.

VI. Residual Impacts

The area has been grazed by livestock since the early part of the 1900's if not longer. Recent vegetative monitoring studies have shown that grazing, at the current permitted numbers of animals, is sustainable. If the mitigation measures are enacted, then there would be no residual impacts to the proposed action

VII. Mitigating Measures And/Or Permit/Lease Conditions

Vegetation monitoring studies will continue to be conducted and the permitted numbers of livestock will be adjusted if necessary. If new information surfaces that livestock grazing is negatively impacting other resources, action will be taken to mitigate the impacts.

VIII. Fundamentals of Rangeland Health

The fundamentals of rangeland health are basic components of healthy rangelands and guiding principles for the development of standards and guidelines for livestock grazing. The fundamentals are identified in 43 CFR §§4180.1 and pertain to watershed function, ecological precesses, water quality and habitat for threatened and endangered (T&E) species or other special status species. Based on the best available data and professional judgement, this EA addresses the fundamentals of Rangeland Health.

Field Office Staff Involvement/Review

John Spain - Rangeland Management Specialist
Rand French - Wildlife Management Biologist
Jerry Ballard - Outdoor Recreation Planner
Jim Schroeder - Watershed Specialist

Pat Flannary - Archeologist

Attachment 1
COMPARISON OF DESIRED PLANT COMMUNITY RESOURCE OBJECTIVES TO LONG TERM ALLOTMENT AVERAGE IN THE SHINNERY OAK DUNES (SOD) COMMUNITY

ALLOTMENT : 65049		PERCENT COVER OBJECTIVES					VEGETATIVE COVER BY PERCENT COMPOSITION OBJECTIVES			
PASTURE/ ECOLOGICAL SITE	ECOLOGICAL NAME	BARE GROUND (5 - 20%)	LITTER (25 - 70%)	SMALL & LARGE ROCK (0 - 1%)	GRASS & FORBS (16 - 40%)	SHRUBS & TREES (3 - 17%)	GRASSES (50 - 70%)	FORBS (10-15%)	SHRUBS (25 - 40%)	TREES (- %)
West Sand		30.19	45.32	0.00	20.88	3.60	84.57	2.78	11.25	1.40
070BY061NM	Sand Hills CP-2									
Middle Sand		56.59	23.43	0.00	16.79	3.19	82.18	3.72	11.29	2.80
070BY061NM	Sand Hills CP-2									
Allotment Average		43.39	34.38	0.00	18.84	3.40	83.38	3.25	11.27	2.10

Attachment 1
COMPARISON OF DESIRED PLANT COMMUNITY RESOURCE OBJECTIVES TO LONG TERM ALLOTMENT AVERAGE IN THE SHINNERY OAK DUNES (SOD) COMMUNITY

ALLOTMENT : 65050		PERCENT COVER OBJECTIVES					VEGETATIVE COVER BY PERCENT COMPOSITION OBJECTIVES			
PASTURE/ ECOLOGICAL SITE	ECOLOGICAL NAME	BARE GROUND (5 - 20%)	LITTER (25 - 70%)	SMALL & LARGE ROCK (0 - 1%)	GRASS & FORBS (16 - 40%)	SHRUBS & TREES (3 - 17%)	GRASSES (50 - 70%)	FORBS (10-15%)	SHRUBS (25 - 40%)	TREES (- %)
Transect WS77		31.77	35.45	0.00	26.76	6.02	60.54	0.00	39.46	0.00
070BY061NM	Sand Hills CP-2									
Transect BM203		19.73	32.78	0.00	42.47	5.01	74.59	0.00	25.42	0.00
070BY055NM	Sandy Plain CP-2									
Transect HW189		7.67	24.00	0.00	55.33	13.00	78.66	0.00	21.34	0.00
077CY056NM	Sandy Plain HP-3									
Allotment Average		19.72	30.74	0.00	41.52	8.01	71.26	0.00	28.74	0.00

Attachment 3

Robel Pole Monitoring Data Summary, Allotment #65049				
West Sand Pasture				
4/6/99	< 13 in.	> 13 in.	> 20 in.	Total > 13
Data points**	66	8	1	9
Overall Average	6.70			

Robel Pole Monitoring Data Summary, Allotment #65049				
West Sand Pasture				
2/7/00	< 13 in.	> 13 in.	> 20 in.	Total > 13
Data points**	41	29	5	34
Overall Average	13.05			

Robel Pole Monitoring Data Summary, Allotment #65049				
Middle Sand Pasture				
4/6/99	< 13 in.	> 13 in.	> 20 in.	Total > 13
Data points**	73	2	0	2
Overall Average	5.83			

Robel Pole Monitoring Data Summary, Allotment #65049				
Middle Sand Pasture				
2/7/00	< 13 in.	> 13 in.	> 20 in.	Total > 13
Data points**	32	32	11	43
Overall Average	14.75			

** Data points are an average of the readings from four cardinal directions. 25 data points per transect line (3 transects = 75 data points). Readings that did not contain bunchgrasses are not included.

FINDING OF NO SIGNIFICANT IMPACT/RATIONALE

FINDING OF NO SIGNIFICANT IMPACT: I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined the **proposed action** will not have significant impacts on the human environment and that preparation of an Environmental Impact Statement (EIS) is not required.

Rationale for Recommendations: The proposed action would not result in any undue or unnecessary environmental degradation. The **proposed action** will be in compliance with the Roswell Resource Management Plan and Record of Decision (October, 1997).

_____ _____

T. R. Kreager, Date
Assistant Field Office Manager - Resources

EA Number: NM-060-00-165 Allotment Numbers: 65049 & 65050 Preparer: John Spain			Action Type: **GRAZING AUTHORIZATION**		
Resource / Activity	Not Present	Not Affected	**May Be Affected	Reviewer Surname	Date
Air Quality*				Hydrologist	
Floodplains*					
Water Quality-Drinking/Ground*					
Soils/Watershed					
Vegetation				Rangeland Management Specialist	
Livestock Grazing					
Invasive, Nonnative Species*					
Wastes, Hazardous or Solids*				Hazardous Waste Spec.	
Prime/Unique Farmlands*				NRS/Realty Specialist	
Lands/Realty/ROW					
Fluid Minerals				Petroleum Engineer	
Mining Claims				Geologist	
Mineral Materials					
Threatened or Endangered Species*				Wildlife Biologist	
Wetlands/Riparian Zones*					
Wildlife Habitat					
Native American Religious Concerns*				Archaeologist	
Cultural Resources*					
Areas of Critical Environmental Concern*				Wildlife Biologist	
Wild/Scenic Rivers*				Outdoor Recreation Planner	
Wilderness*					
Cave/Karst Resources					
Outdoor Recreation					
Visual Resources					
Low Income & Minority Population Concerns					
Access/Transportation				Natural Resource Specialist	

* "Critical Element" - must be addressed in all NEPA documents.
** "Affected Element" - must be addressed in the attached Environmental Assessment.